

6. Either or both legs of a three way call may be an interexchange or international call.
7. TWC is not available on lines with two or more parties.
8. References:
 - GR-577 LSSGR: Three-Way Calling, FSD 01-02-1301 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000577 Issue 1 & Revision 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line serving arrangement.

Transmission Improvement for Circuit Switched Services (8012)

This capability provides the ESP with a high quality transmission line for use on local switched service. It provides transmission performance between 0 and 4 dB at 1000 Hz between the network interface at the subscriber's location and the serving central office switch.

Generic Name of ONA Service	Product Name	BSE or CNS
Transmission Improvement for Circuit Switched Services	Qwest - Improved Transmission Performance	BSE

References: GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, June 1994 (replaces TR-NWT-000334, Issue 3).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Uniform Access Numbers for Business Lines (4010)

This service provides the ESP with the capability of using a single seven digit telephone number throughout the BellSouth region, Operating Company, State, Local Access and Transport Area (LATA), or NPA. The ESP's traffic is delivered to one location per Traffic Operator Position System (TOPS) Tandem switch per LATA.

Generic Name of ONA Service	Product Name	BSE or CNS
Uniform Access Numbers for Business Lines	BS - Uniform Access Numbers	BSE

FEATURE OPERATION:

The ESP's Uniform Access Number (UAN) traffic is delivered from the originating end office to the associated TOPS Tandem switch over a dedicated trunk group. The TOPS Tandem switch provides the translation and routing functions required to support the service. The ESP's clients will dial the UAN, which will be routed to the associated TOPS Tandem switch. The TOPS Tandem switch translates the UAN and then routes the traffic to the ESP's location. The UAN service is required to support the Automatic Number Identification (ANI) and Custom Service Areas (CSA) basic service elements.

The originating end office translations are set to route the UAN traffic using a unique NXX as a trigger. The 440 NXX will serve the BellSouth region, the 530 NXX will serve South Central Bell only, and the 930 will serve Southern Bell only.

A dedicated one way trunk group from each of the TOPS Tandem switch subtending end offices is used to deliver the UAN traffic to the TOPS Tandem switch. This trunk group is designed to deliver the called number (UAN) and calling line ANI to the TOPS Tandem switch. The Operator Services Signaling (OSS) protocol is used to deliver the information over the trunk group.

The TOPS Tandem switch collects the incoming information and translates the UAN to determine how the call should be handled.

The UAN calls can be delivered to the ESP either through the normal circuit switched network or using dedicated trunks from the TOPS to the ESP's location. If ANI delivery is desired, the trunk side option is required.

At the present time, this service will only be offered to ESPs through the General Subscriber Services Tariff (GSST).

References: not available

This service, if offered as a BSE, is associated with the Circuit Switched Line or Circuit Switched Trunk basic serving arrangements.

3. **Appendix 1 - Region Specific Services - Technical Descriptions for Packet Switched Access Arrangements**

Abbreviated Call - Packet (8036)

This capability allows the customer to access predefined addresses by utilizing a predesignated unique alphanumeric character(s) in lieu of the normal call initiation process. The port is not limited to sole access of the predefined address when normal call initiation procedures are followed.

Generic Name of ONA Service	Product Name	BSE or CNS
Abbreviated Call - Packet	Qwest - Abbreviated Call - Packet	CNS

Default Window Size - Packet (5022,8007)

This permits the customer to select a nonstandard default window size of three in one or both directions of transmission. If nonstandard default window sizes are not selected, the default window size of two will apply to both directions of transmission. Default window sizes are set at subscription time.

Generic Name of ONA Service	Product Name	BSE or CNS
Default Window Size - Packet	NX - Default Window Size	BSE or CNS
	Qwest - Nonstandard Window Size - Packet	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Flow Control Parameter Negotiation - Packet (8003)

Flow control allows the data receiver to limit the rate at which it accepts data by controlling the window size and maximum packet size for each direction of transmission. Negotiation is done on a per call basis during the call setup.

Generic Name of ONA Service	Product Name	BSE or CNS
Flow Control Parameter Negotiation - Packet	Qwest - Flow Control Parameters (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Incoming Calls Barred - Packet (5024,8001)

Incoming Calls Barred allows the customer the option to prevent incoming virtual circuit calls from being sent to their data terminal equipment (DTE). When used in conjunction with a Closed User Group (CUG) this feature prevents individual members of the CUG from receiving calls from outside of the CUG. This option will allow call origination only.

Generic Name of ONA Service	Product Name	BSE or CNS
Incoming Calls Barred - Packet	NX - Incoming Calls Barred	BSE or CNS
	Qwest - CUG Incoming Access Barred (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Logical Channels - Packet (8005)

Logical Channels capability allows the data terminal equipment (DTE) to derive multiple logical channels from a single physical access line. This is accomplished by specifying the logical channel number on every packet which crosses the network interface.

Generic Name of ONA Service	Product Name	BSE or CNS
Logical Channels - Packet	Qwest - Logical Channel (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Logical Channel Layout - Packet (8004)

This capability permits the arrangement of logical channels to be configured as incoming, outgoing, two way and/or private virtual circuit. The logical channel layout is established at subscription time.

Generic Name of ONA Service	Product Name	BSE or CNS
Logical Channel Layout - Packet	Qwest - Logical Channel Layout (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Menu Server - Packet (7000)

This service is no longer offered by Southwestern Bell.

Multiple Network Addresses/Port - Packet (3001,5027,8006)

This capability allows more than one network address to be assigned to a single access port. Multiple addresses can be purchased in blocks, up to a maximum number of 1000. Messages are delivered according to predetermined customer specifications.

Generic Name of ONA Service	Product Name	BSE or CNS
Multiple Network Addresses/Port	BA - Multiple Network Addresses (Packet)	BSE
	NX - Multiple Network Addresses/Port	BSE or CNS
	Qwest - Multiple Network Addresses (Packet)	BSE

Reference: Bell Atlantic Technical Reference 72211, Interface Specification for the Bell Atlantic Public Data Network, Issue C, December 1991.

This service, if offered as a BSE, is associated with the Packet Switched X.25 basic serving arrangement.

Outgoing Calls Barred (5028,8002)

This capability allows the customer the option to prohibit outgoing virtual calls for their data terminal equipment (DTE). When used in conjunction with a Closed User Group (CUG) this feature prevents individual members of the CUG from establishing calls outside of the CUG. This option will allow the receipt of incoming virtual circuit calls only.

Generic Name of ONA Service	Product Name	BSE or CNS
Outgoing Calls Barred - Packet	NX - Outgoing Calls Barred	BSE or CNS
	Qwest - CUG Outgoing Access Barred (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Permanent Virtual Circuit - Packet (5029,8008)

Permanent virtual circuits are the electronic equivalent of a private line between two points. At the customer's option, a virtual circuit is established between two customer data terminal locations (DTEs) within the network on a dedicated basis. These two locations are electronically connected, operating similar to a private line between the two points. The association between the two DTEs is established via service provisioning.

Generic Name of ONA Service	Product Name	BSE or CNS
Permanent Virtual Circuit - Packet	NX - Permanent Virtual Circuit	BSE or CNS
	Qwest - Permanent Virtual Circuit (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

Reverse Charge Request Option (Packet) (5030,8009)

Reverse charging allows the originating user to request that the call be charged to the called party during call setup. The reverse charging call request is delivered to the called party only when their data terminal equipment (DTE) is configured for Reverse Charge Acceptance. If the terminating DTE does not subscribe to Reverse Charge Acceptance, the call will be cleared.

Generic Name of ONA Service	Product Name	BSE or CNS
Reverse Charge Request Option (Packet)	NX - Reverse Charge Request	BSE or CNS
	Qwest - Reverse Charge Option (Packet)	BSE

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 basic serving arrangement.

4. Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Access Arrangements

Access To Customer Premises Announcement (5035)

This feature allows an ESP to furnish customized announcement services to an Automated Call Distribution customer. ACPA connects callers in the ACD queue to customer provided announcements or music. Using this feature the ESP can provide and manage announcements on behalf of the customer. The ESP requires private line access for each ACPA arrangement.

Generic Name of ONA Service	Product Name	BSE or CNS
Access To Customer Premises Announcements	NX - Customized Announcement Service	BSE

FEATURE OPERATION:

The ESP furnishes an announcement to the ACPA port over a private line. The ACD will automatically connect a caller in queue to the ACPA port when the feature is present.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	DMS-100
Earliest Generic Release	BCS36

2. This is a feature of Automatic Call Distribution.

Access To Order Entry System (4004)

This capability will allow ESPs to provide basic ordering information to the business office through a mechanized interface.

Generic Name of ONA Service	Product Name	BSE or CNS
Access To Order Entry System	BS - Administrative Management Service (AMS)	BSE or CNS

FEATURE OPERATION:

A new offering, currently using the BellSouth project name of Administrative Management Service (AMS), will provide a mechanized interface for customers to provide service ordering information to the appropriate business office.

This service will be offered on a dial-up or dedicated basis. The ESPs will not have direct access to the Order Entry System, but will have access through the AMS front-end processor. The front-end processor will provide the necessary security and information screening.

References: not available.

This service, if offered as a BSE, is associated with the Access To Operations Support Systems Information BSE (which is associated with the Dedicated Digital (< 64 kbps) basic serving arrangement).

ADSL Service (4032)

ADSL Service is an interstate data access service that allows Internet Service Providers (ISPs) or Network Service Providers (NSPs) to provide service to their customer(s) using Asymmetric Digital Subscriber Line technology. This capability allows ISPs/NSPs to establish a point-to-point virtual circuit between an end user premises location and another location designated by the subscribing ISP/NSP. ADSL Service allows downstream speeds from 192 Kbps to 6.0 Mbps and upstream speeds from 192 Kbps to 640 Kbps. ADSL Service requires ATM switch connectivity between the ATM switch and the ISP's/NSP's designated location.

Generic Name of ONA Service	Product Name	BSE or CNS
ADSL Service	BS – BellSouth ADSL Service	BSE

DS0-B Subrate Multiplexing Service (4015)

DS0-B Subrate Multiplexer (SRM) service provides time division multiplexing of multiple client digital derived data channels into a single standard interface for efficient interconnection to an ESP.

Generic Name of ONA Service	Product Name	BSE or CNS
DS0-B Subrate Multiplexing Service	BS - DS0-B Interface	BSE or CNS

FEATURE OPERATION:

Service is established via a service order placed by the ESP with the local operating company. Appropriate dedicated transport facilities (including local channel and applicable interoffice mileage elements) are also ordered for access to the SRM. The ESP negotiates and makes arrangements with its clients to connect their individual derived data channels to the SRM. These orders must be coordinated with the ESP in order to ensure adequate facilities are available and appropriate channel assignments, as specified by the ESP, are made.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This capability is independent of central office switch type.
2. The DS0-B SRM is interconnected to the ESP's client via an appropriate derived data channel service in the local serving office.
3. The ESP interconnects to the DS0-B SRM via an appropriate four-wire dedicated transport facility.
4. The DS0-B signal is a standard DDS signal as specified in Technical Advisory TA-TSY-00280.

References:

See BellSouth documents TR73548 "Derived Channel Access Service Digital Data Over Voice Network Interface Specifications", Issue 1 June 1990 and Addendum 1 March 1991.

This service, if offered as a BSE, is associated with the Dedicated Derived Channel BSA.

High Capacity Digital Hand-Off Service (3026)

High Capacity Digital Hand-Off Service carries voice grade local exchange and Channel Services between the customer's serving central office and the customer's compatible premises equipment using a DS1 facility with the D4 format. Up to 24 local exchange voice and Channel Services can be supported on the facility. The facility is handed-off to the customer in the D4 format.

Generic Name of ONA Service	Product Name	BSE or CNS
High Capacity Digital Hand-Off Service	BA - High Capacity Digital Hand-Off Service	BSE

FEATURE OPERATION:

At the time the service is ordered the customer must designate which services are to be carried on each of the 24 channels in the DS1 facility. Future additions and changes to channel assignments must be coordinated with the Telephone Company.

Where the serving central office is a digital switch, the facility may run from the customer's high capacity interface directly into the central office switch. Only DID trunks may be carried over this directly connected facility.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. The High Capacity Digital Hand-Off facility is a digital channel operating at a transmission speed of 1.544 Mbps. It is a simultaneous two-way transmission media using serial, bipolar, return-to-zero, isochronous, alternating mark inversion format.
2. 1000 Channel metallic services and Digital Data Service may not be transported over these facilities.
3. Reference: GR-54 DS1 High-Capacity Digital Service End User Metallic Interface Specifications, Issue 1, December 1995 (replaces TR-NPL-000054, Issue 1)

This service is a BSE associated with the Dedicated High Capacity Digital (1.544 Mbps) Basic Serving Arrangement in the local exchange tariff and an alternative of Line Side BSA in the access tariff.

Inband Signaling (3018)

Inband Signaling provides the ability to order analog voice grade Special Access circuits with signaling arrangements as described in TR-NWT-000335.

Generic Name of ONA Service	Product Name	BSE or CNS
Inband Signaling	BA - Inband Signaling	BSE

Reference:

- TR-NWT-000335 Voice Grade Special Access Service - Transmission Parameter Limits and Interface Combinations, Issue 3, May 1993
- MDP-326-584 - Table 4 Data Communications Using Voiceband Private Line Channels, Issue 1, October 1973

This service, if offered as a BSE, is associated with the Dedicated Voice Grade basic serving arrangement.

Line Monitor Service (3027)

Note - this service was removed from the January 1996 issue of the ONA Services User Guide. It is no longer being offered.

Multiplexing - Digital (2000,2001,2002,2018,3005,4007,5034,7034,8013)

Multiplexing is a technique that uses a single transmission facility to provide several transmission channels, such as by sharing the time slots of the channel (time-division multiplexing) or superimposing many frequencies at the same time (frequency-division multiplexing) in order that many signal sources and links may communicate during a given time period. This capability may include multiplexing such as:

- DS0 To Subrates - This capability provides for the time division multiplexing of multiple digital data signals operating at the subrate speeds of 2.4 Kbps, 4.8 Kbps, or 9.6 Kbps with a 64 Kbps DS0 digital signal.
- Multiplexing - DS1/Analog or DS0 - This capability provides for the pulse code modulation and/or time division multiplexing of multiple analog voice and/or multiple 64 Kbps DS0 digital signals into a 1.544 Mbps data stream for the purposes of reducing the number of transmission links required between two points.
- Multiplexing - DS1 To DS0 - This capability provides for the time division multiplexing of up to twenty-four 64 Kbps DS0 digital signals into a 1.544 Mbps DS1 digital signal.
- Multiplexing - DS1 To Voice Grade - This capability provides for the pulse code modulation and time division multiplexing of up to twenty-four 4 kHz voice grade channels into a 1.544 Mbps DS1 digital signal.
- Multiplexing - DS3/DS1 - This capability provides for the time division multiplexing of up to twenty-eight 1.544 Mbps DS1 digital signals into a 44.736 Mbps DS3 digital signal.

Generic Name of ONA Service	Product Name	BSE or CNS
Multiplexing - Digital	AM - Ameritech DS1 to DDS/DS0 Multiplexing	BSE
	AM - Ameritech DS1 to Voice/Ameritech Base Rate Multiplexing	BSE
	AM - Ameritech DS3 to Ameritech DS1 Multiplexing	BSE
	AM - DS0 To Subrate Multiplexing	BSE
	BA - Multiplexing	BSE
	BS - DS1/Analog or DS0 Multiplexer	BSE or CNS
	BS - DS3/DS1 Multiplexer	BSE or CNS
	NX - DS3/DS1 Multiplexer	BSE
	SWB - Multiplexing	BSE
	Qwest - Multiplexing	BSE

References:

- TR-TSY-000009 Asynchronous Digital Multiplexes Requirements and Objectives, Issue 1, May 1986.
- TR-TSY-000010 Synchronous DS3 Add-Drop Multiplex (ADM 3/X) Requirements and Objectives, Issue 1, February 1988.
- Ameritech - See GA-342 High Capacity Digital Special Access Service Transmission Parameter Limits and Interface Combinations, Issue 1, December 1995 (replaces TR-INA-000342, Issue 1)

This service, if offered as a BSE, is associated with the Dedicated Voice Grade and the Dedicated High Capacity basic serving arrangements.

For Ameritech, DS1 to DDS/DS0 and DS1 to Voice/Base Rate are associated with Dedicated High Capacity Digital (1.544 Mbps) type BSA; DS3 to DS1 is associated with Dedicated High Capacity Digital (>1.544 Mbps) type BSA.

DS3/DS1 multiplexer is associated with the Dedicated Digital 45 Mbps BSA.

Route Diversity **

**** NOTE - this capability was moved to the main section of the ONA Services User Guide for the July 1993 update.**

User Initiated Diagnostics (4009)

This capability will allow ESPs to electronically report and check the status of local and access, circuit and line troubles into support systems. Customers may also receive hard copy printouts.

Generic Name of ONA Service	Product Name	BSE or CNS
User Initiated Diagnostics	BS - Administrative Management Service (AMS)	BSE or CNS

FEATURE OPERATION:

A new offering, currently using the BellSouth project name of Administrative Management Service (AMS), will provide a mechanized interface for customers to access this service.

This service will be offered on a dial-up or dedicated basis. The ESPs will not have direct access to the Order Entry System, but will have access through the AMS front-end processor. The front-end processor will provide the necessary security and information screening.

References: not available.

This service, if offered as a BSE, is associated with the Access To Operations Support Systems Information BSE (which is associated with the Dedicated Digital (< 64 kbps) basic serving arrangement).